et Avium,' published in 1811, had the rashness to found a genus, *Burhinus*, on Latham's imperfect description of a rude drawing, and the consequence has been that for the last thirty years our systems of ornithology have been haunted by a "*Burhinus magnirostris*"—a *vox et præterea nihil*, unknown both to nature and to science. The original drawing which led to all this confusion has now assisted in dispelling it.

Charadrius *griseus*, Lath., is I conceive the *Charadrius virginiacus*, Borkh. (*C. marmoratus*, Wagl., *C. pectoralis*, Less., *C. affinis*, Boié).

The following remarks refer to some additional species of Latham not in Mr. Gray's list:—

Falco *ponticerianus*, var. Lath., is the *Haliastur leucosternus* (Gould).

Corvus *melanops*, Lath., is the *Graucalus melanops*.

Gallinula *porphyrio*, *var.* B. Lath., is *Porphyrio melanonotus*, Tem.

Falco *melanops*, Lath., is the *Accipiter torquatus*, Tem. (*Nisus australis*, Less.) As the black round the eye which suggested the specific name of *melanops* seems to be an invention of the artist, I would reject that name on the ground of its serious incorrectness, and retain the later one of *torquatus*.

Falco *albicilla*, *var.* Lath., is the *Ichthyaëtus leucogaster* (Lath.), young (*Haliaëtus sphenurus*, Gould).

Falco *clarus*, Lath., is perhaps the young of *Astur novæ hollandiæ* (Lath.).

Falco *pacificus*, Lath., is perhaps a peculiar state of *Milvus isurus*, Gould, with the head pure white.

Muscicapa *erythrogastra*, *var.* 2. Lath. Syn. Sup. ii. p. 216, is perhaps a new species of *Petroica*, differing from *P. multicolor* by having a white eyebrow.

(Cuculus *flabelliformis*, Lath., may perhaps be the *Cuculus cineraceus*, Vig., J. G.)

Ardea *antigone*, *var.* Lath., is *Grus antigone* (Lin.) (*Grus orientalis*, Frankl.).

Lanius *curvirostris*, Lath., is *Cracticus torquatus* (Lath.) (*Vanga destructor*, Tem.).

Ardea *maculata*, Lath., is *Nycticorax caledonica*, young.

Besides the above there are several other species which Latham originally described from these drawings, but which, having been long since identified and made known to naturalists, it is unnecessary to enumerate.

XLVIII.—*Notes on the Botany of Sicily.* By John Ball, B.A., M.R.I.A.

Having observed in a recent number of this Magazine a paper upon the Botany of Sicily, containing a list of species observed or recorded as belonging to that island, I have been induced to refer to some notes made during a very hasty

tour, which I did not at the time conceive to be worthy of publication. On looking over the catalogue of species given by Mr. Hogg I was struck with the extreme meagreness of its contents, extending to scarce half the number of species already known as natives of Sicily, though probably a far more complete one would come far short of adequately representing the exuberant richness of its gorgeous flora. It is indeed extraordinary that an island so easily accessible to travellers, which presents to them probably less of difficulties and inconveniences than any part of the South of Europe, and which offers so many objects of surpassing interest, both those already known, the theme of the historian and the poet, and those yet in store to reward the investigations of the antiquarian or the naturalist, should be so little visited and so imperfectly known. To be told that the temple of Segesta stands in solitary grandeur amongst mountains rarely tracked by the foot of a traveller, that the guide can scarcely determine the uncertain course amidst the pathless sands where arise the colossal ruins of Selinuntium, that there are yet unexplored tracts where hundreds of new and beautiful species would doubtless reward the botanist, whilst the geology offers many most interesting problems to the future historian of the earth, seems a sort of reproach on the activity and energy of the numerous travellers who yearly quit England, seeking throughout Europe for new objects of inquiry. I find that even amongst the limited number of species which it was possible for me to collect during a hurried ride round the island under an almost vertical sun, there is a great portion not contained in the catalogue furnished by Mr. Hogg; and I think it may tend to show what the real extent of the Sicilian flora must be, and at the same time be interesting to botanists who may visit the South of Europe, to give a list of the known species of the single family of Grasses, to which I have paid some attention, with some remarks, attracting their notice to various points which may be studied on the spot by any one having sufficient time to spare for the purpose. I have added a few notes of my tour, pointing out localities for some of the more remarkable plants, those interesting either for their rarity, beauty, or scientific importance. The authorities for most of the species in the following list, not seen by myself, are extracted from the first volume of Bertoloni's 'Flora Italica,' a work well known to many of your readers as indispensable to the student of Italian, indeed of European botany; as unsurpassed, and scarcely equalled, for the accuracy of its descriptions, the soundness of its criticism, or the extent of research which has been bestowed upon it.

The traveller landing in Sicily from Naples is at once sur-

prised by the almost total change in the vegetation. The least curious eye must be struck by the strange forms of the distorted *Opuntia*, the dark glossy foliage of the *Carubia*, or the stiff motionless aloe (*Agave americana*), which within a short period has become universally diffused; but to the botanist few of the new objects which meet him in every direction will be more attractive than the beautiful and varied species of *Gramineæ*.

The neighbourhood of Messina, particularly the sandy tract extending to the now undreaded Charybdis and the Pelorian promontory, is peculiarly rich in plants of this class; here will be found the beautiful *Panicum teneriffæ**, R. Br. (*Saccharum teneriffæ*, Fl. Gr.), the *Lamarckia aurea*, Mœnch., *Stipa tortilis*, Dsf.; many species of *Festuca* of the *Vulpia* group, including *F. alopecurus*, Pers., and *F. ligustica*, Bert. (whether the latter be distinct from *F. geniculata*, W., is I should think doubtful); the *Avena condensata*, Link, which occurs here and elsewhere on the east coast (it may be doubted whether this should not be united with *A. neglecta*, W.), and *Ægilops triaristata*, W. The genus *Ægilops* requires further study and illustration; though favoured by specimens from the Botanic Garden at Pisa, I can find no permanent character by which to distinguish *Æ. neglecta*, Savi, from *Æ. ovata*, nor do the remarks of Bertoloni enable me to separate *Æ. triaristata*, W., from *Æ. triuncialis*, L. Amongst the species of other orders, the botanist will notice several maritime *Umbelliferæ*, including *Thapsia Garganica*, Fl. Gr., and *Cachrys Sicula*, L., and among the less conspicuous plants the *Gnaphalium tenuifolium*, Psl.†, which seems to have some claims to the rank of a distinct species.

The rocks near St. Alessio are covered with beautiful species, including *Scabiosa cretica*, L., *Matthiola rupestris*, R. Br. (which seems too near to *M. sinuata*), *Dianthus velutinus*, Guss., *Silene fruticosa*, L., *Euphorbia ceratocarpa*, and *E. biglandulosa*, Dsf., *Lythrum Græfferi*, Ten., *Artemisia arborescens*, L., *Centaurea sicula*, L., and *C. cineraria*, L.; also *Cineraria bicolor*, W. (it is to be wished that some botanist would clear up the confusion that exists as to several species of this group). The neighbouring sands abound in rare plants; the *Matthiola tricuspidata*, R. Br., is conspicuous; amongst the *Gramineæ*, the scarce *Bromus fasciculatus*, Presl, *Festuca* (*Vulpia*) *ciliata*, DeC., a beautiful and distinct species, *F. maritima*, Kunth

* I have not observed the reddish tint given to the figure in the 'Flora Græca.'

† *Filago Gallica*, β. DC. Prod.

(*Triticum maritimum*, L., Bertol. Fl. It.); it seems quite impossible to separate this from the group forming the genus *Sclerochloa* of Link. I here found a variety of *Bromus sterilis*, L., with the panicle dense and pendulous, and the membranous margin of the calycine valves broader and whiter than usual, giving the plant a beautiful silvery appearance; it is very possibly a distinct species. A few miles to the southward of St. Alessio is Taormina (the ancient Taurominium): as the traveller stands above the vast area of its theatre, his eye is distracted from the glorious prospect which extends from the southern point of Calabria on the one hand, across the Ionian Sea, to the rocks of the Cyclops and up to the snowy peak of Etna, by the gorgeous vegetation which mantles over this mighty monument of ancient art. The *Acanthus mollis*, *Phlomis fruticosa*, and *Solanum sodomæum* are conspicuous, and here the botanist first notices the beautiful little *Sedum cæruleum* abundant on the walls and rocks. I should think that no spot in Sicily would better reward the naturalist or antiquary for a halt of some days: the small town of Taormina contains many beautiful remnants of Norman architecture, and the numerous half-ruined towns and villages that are perched on the summit of lofty and seemingly scarce accessible rocks must abound in objects of interest; while the little inn at Giardini, though not very inviting, is one of the most tolerable in the country. No one visiting the supposed site of the scenes described in the Odyssey—the island of Polyphemus, will fail to remark the singular geological phænomena there presented; where beds of a very recent tertiary limestone are interposed between the more ancient columnar lava and an upper stream, which is not to be distinguished from that which advances into the sea from the neighbouring shore; inducing the suspicion that the whole may have undergone material changes even since the date of the Homeric record. Indeed it is still to be determined whether the shells contained in a large portion of the Sicilian tertiary strata be not identical with existing species*, thus referring the period of elevation to a more recent epoch than has hitherto been suspected. The marshy ground south of Catania contains many interesting plants, such as *Œnanthe globulosa*, *Bupleurum Odontites*, L. (nec Sm.), &c.; one group of the genus *Phalaris* may be well studied here, as within a confined range may be found *P. paradoxa*, L., *P. nodosa*, Spr., *P. aquatica*, L. (*P. cærulescens*, Auct.), and *P. minor*, W.; it may be worth inquiry whether the characters

* I have been informed that several supposed extinct species have been dredged up by Mr. Forbes in the Levant.

of the last species be not subject to variation. Of the vegetation of Etna much has been written, yet I am satisfied that a more lengthened examination than has yet been given, especially to its western slopes, would amply reward the botanist who would undertake it. Upon the Monte Rosso, the lowest of the long line of craters which have been opened by the successive eruptions, many of the species of the lower region will be found, amongst them *Sedum amplexicaule*, DeC. (*Sempervivum tenuifolium*, Fl. Gr.). The extent of snow at the period of my ascent prevented my examination of the upper region; the last plants which I saw in flower were *Viola Ætnensis*, Psl. (which is doubtless, as DeCandolle has placed it, a variety of *V. calcarata*), and *Erophila præcox*, DeC., scarcely an inch in height; this most of the foreign botanists consider distinct: I presume that the *E. verna*, *β.* of Hooker's 'British Flora' is this species. The limestone tract round Lentini is covered with beautiful plants, such as *Ononis ramosissima*, Dsf., *Phlomis Herba-venti*, L., *Lonicera implexa*, Bert., *Eryngium triquetrum*, Vahl., and *E. pusillum*, L.

In wandering over the barren rocks where once stood Syracuse, the mind is so prepossessed by the thousand confused memories of former days as to forget its accustomed occupations, and at first even the most hardened botanist will hesitate lest in pursuing his vocation he sacrilegiously disturb the ashes of some of that illustrious race who once made this spot celebrated; he will however speedily overcome his scruples on noticing several scarce species, such as *Origanum heracleoticum*, *Marrubium hispanicum* and *Pteris cretica*; these grow in different parts of the Latomie, the enormous quarries which alone attest the extent of the ancient city; in the same place I found the *Melica minuta* of Bertoloni, 'Fl. It.' Kunth seems not to have well understood this group, as the *M. ramosa*, Vill. of Bertoloni seems certainly distinct from its allies; it is a scarce plant; I have seen it only in the Roman stations mentioned in the 'Fl. It.' The *Melia Azedarach*, a quite tropical tree, has become naturalized about Syracuse. As the guides conduct all travellers up the stream of the Anapus, where the Papyrus grows in great luxuriance to a height of eight or ten feet, no one can avoid remarking this, the king of the Cyperaceous tribe; as it grows in several other similar situations, I see no reason to doubt Gussone's correctness in supposing it a native of Sicily. At or near the mouth of the Anapus I noticed *Rottboëllia cylindrica* and *fasciculata*?; a large *Glyceria* near to *G. fluitans* in character, but approaching *G. aquatica* in habit, probably a new species of the genus; two spe-

cies of *Frankenia*, (*F. lævis* and another doubtful one,) together with several litoral species.

The limestone hills which lie to the westward of Syracuse contain many interesting species, but have been scarcely at all examined; I noticed *Salvia triloba*, L., *Convolvulus tricolor*, L., a doubtful *Pyrus*, *Ophrys tenthredinifera*, W., and *Orchis lactea*, Poir. It is only on arriving on the southern shores of Sicily that the traveller discovers the semi-tropical character of its vegetation; here the ground is covered with the dwarf palm, *Chamærops humilis*, L., and many species of *Helianthemum*, and waving in the breeze will be seen those singular shrubs *Ephedra distachya*, and *E. fragilis*, Dsf.* On the sea-banks grow *Momordica Elaterium*, and *Mesembryanthemum crystallinum*, and here and there tufts of the beautiful and anomalous grass *Lygeum spartum*. Amongst many scarce *Umbelliferæ* I gathered on the sands near Terranova *Orlaya maritima*, Koch, *Krubera leptophylla*, Hoffm., *Kundmannia* (*Sium*) *sicula*, DeC., &c.; also *Bromus lanceolatus*, *B. scoparius*, *B. maximus*, several varieties, *Ammophila arundinacea*, &c. It would be impossible within the limits of a brief sketch to give any notion of the great variety of the vegetation of this coast, I have no doubt but that many interesting species would reward any examination that may be given to it: Girgenti, from the surpassing interest attaching to its architectural remains, would naturally be chosen as head quarters; in the same neighbourhood a large number of fossils of the tertiary strata might be collected with little trouble: amongst the rare plants already known in the neighbourhood, I may mention *Ornithogalum arabicum*, L., *O. narbonense*, L., *Scabiosa dichotoma*, *Lavatera Agrigentina*, and *L. cretica*; the first four I observed near to the so-called temple of Juno. I suspect that the numerous species of the tribe of *Cynareæ* have not yet been sufficiently examined; I found a species of *Carduncellus*, probably undescribed; the *Cirsium Italicum*, DeC. Pr., though scarce in Italy, is here frequent: there are also many Sicilian species of *Euphorbia* omitted in Mr. Hogg's list; besides those already noticed there are, *E. trinervis*, Bert., *E. melapetala*, Gaspar., *E. cuneifolia*, Guss., *E. orientalis*, L., *E. spinosa*, L., *E. pterococca*, Spr., *E. Cupani*, Guss., and probably many more.

In the beautiful district lying between Trapani and Palermo, the naturalist who will explore the pathless mountain ranges, such as that which runs to the westward from Alcamo, will

* Any botanist carrying a microscope or a powerful lens should carefully examine the structure of the inflorescence and fructification of these plants, as in the dried state this becomes impossible; at present very little seems to be known on the subject.

be sure of being amply rewarded for his labour; it would probably be easy to obtain such letters as would ensure resting-places within a reasonable distance from the scene of his operations; but the less adventurous or more hurried traveller may well content himself with the vicinity of Palermo, which does not disappoint the expectations excited by the magnificence of the first view which he obtains from the heights above Monreale. Within the amphitheatre which he overlooks, there are three different regions for the botanist to examine, the sea-coast, the plain, and the hills around: in the first, amongst other rarities, will be found *Medicago olivæformis*, *M. tribuloides*, *M. Helix*, &c.; two tropical grasses, *Pennisetum distylum* and *Dactyloctenium ægyptiacum*, &c. In the plain round the town grow *Narcissus serotinus*, *Crocus longiflorus*, *Zizyphus Lotus*, *Saccharum ægyptiacum*, and the beautiful *Lobelia tenella*, Biv., which is frequent upon damp walls. On the hills near San Martino I gathered *Matthiola tristis*, *Lychnis Cœli-Rosa* and *L. Coronaria*, *Andropogon pubescens*, Vis., and a new species of *Dactylis*, to which I propose to give the name *disticha*, from its peculiar habit; amongst other species from the hilly district, Professor Parlatore, a young Sicilian botanist of great promise, has discovered *Lepidium bonannianum*, *Chamæpeuce stellata*, DeC., and a new *Agropyrum*, which he has named *A. panormitanum*. That this, which is considered the well-known district of Sicily, should present some new object to every inquirer, may give some idea of how much remains to be done by naturalists in this country; it is not too much to suppose that the following list of Grasses, which contains about 240 species*, may be nearly a hundred short of the real number hereafter to be ascertained; I can only hope that the foregoing brief sketch may have the effect of stimulating the zeal of future travellers, more especially of those who may be able to devote a longer period to their visit than I was myself able to do. In the following list I have given localities for most of the rarer species, and where the plant rests on my own authority; and have affixed a note of interrogation where I do not actually possess specimens from the locality mentioned, even where I do not feel any doubt on the subject.

Note.—I may remark, in respect to Mr. Hogg's observations on the temperature of Palermo, that in July 1841 the thermometer rose on three successive days to 37° R. or 115°·2 F. in the shade; and I have understood that this is not much above the usual heat during the prevalence of the sirocco.

* Mr. Hogg's two lists have somewhat less than one hundred.

CATALOGUE OF SICILIAN GRASSES.

Anthoxanthum odoratum, L.
——— *gracile*, R. and S.
Saccharum Ravennæ, Spr.
——— *Ægyptiacum*, W. banks of the Oreto, Palermo, Gussone.
——— *cylindricum*, Lam. Sea-coast.
Phalaris Canariensis, L. Certainly indigenous on the sandy coast, north of Messina, &c., J. B. sp.
——— *nitida*, Psl. Palermo, Gussone.
——— *nodosa*, Spr. Vizzini, Noto, Gussone.
——— *aquatica*, L. Near Catania, &c., J. B. sp.
——— *minor*, W. Near Catania, J. B. sp.; Terranova, Gussone.
——— *paradoxa*, L. Not unfrequent, J. B.
——— *arundinacea*, L.
Phleum pratense, L.
——— ———, *β. nodosum*, J. B. sp. This can scarcely be separated even as a variety.
——— *echinatum*, R. and S. Madonie, Gussone. *P. felinum*, Fl. Gr., is this plant.
——— *asperum*, Pers.
——— *Bœhmeri*, W., J. B.
——— *Michelii*, All. Madonie, Gussone; lower region of Etna, J. B.?
——— *arenarium*, L., J. B.?
——— *tenue*, Schr. Near Messina, J. B.
Crypsis aculeata, Ait.
——— *schœnoides*, Lam. Near Palermo, Gussone.
——— *alopecuroides*, Schr.
——— *nigricans*, Guss. Several places along the south coast. I suspect it will prove to be only a stunted variety of the last species.
Alopecurus pratensis, L.
——— *agrestis*, L.
——— *bulbosus*, L., J. B.? This is perhaps a var. of the last.
——— *geniculatus*, L. I do not know whether *A. fulvus*, Sm., has been observed in Sicily; I cannot agree with Bertoloni in considering it a form of the last; the rounded anthers and different character of the herbage seem to me constant characters.
——— *utriculatus*, Pers. Catania, J. B.?
Polypogon monspeliensis, R. and S. This beautiful grass is common in salt marshes, growing sometimes, as at the mouth of the Anapus, to a height of three feet. Gussone has described a remarkable variety with the arista only equalling the calycine valves, not three times as long.
——— *maritimus*, R. and S. Sea-coast, Gussone. This species, though like the last, is quite distinct.
Milium effusum, L. Madonie, Gussone.
——— *scabrum*, R. and S. Madonie, Gussone. This, the *M. vernale*, M. B., is I think certainly a good sp. It always has a much simpler panicle and the stem scabrous.
——— *cærulescens*, Pers. Near Syracuse, Gussone.

Gastridium lendigerum, R. and S., J. B. sp. I cannot agree in the reunion of this genus with *Milium*. In an extensive natural order it is surely necessary to allow great weight to habit in establishing generic distinctions.

——— *muticum*, Spr. In several places. Observation may perhaps show that the differences are not permanent which separate this from the preceding very variable species.

Agrostis pallida, DeC. Castelvetrano, &c.

——— *canina*, L.

——— *nitens*, Guss. Trapani, from the salt-marshes, Gussone.

——— *Sicula*, Kunth (*A. glaucescens*, Spr.). I am not acquainted with this species, nor does it appear that Bertoloni is so either.

——— *alba*, L. Very common and variable: amongst other forms there are *A. vulgaris*, E. B.; *A. stolonifera*, L.; *A. pumila*, L.; and I should say the following:—

——— *verticillata*, Vill. Syracuse, J. B. I cannot find satisfactory characters, though assisted by Bertoloni's observations.

——— *pungens*, Schreb. Palermo.

Cynodon Dactylon, Pers. Very common.

Digitaria Sanguinalis, W. A very variable species.

Panicum verticillatum, L. Fields about Palermo, Gussone.

——— *viride*, L. Common.

——— *glaucum*, L. Common. Bertoloni has well distinguished these plants.

——— *Crus-Galli*, L. Common.

——— *zonale*, Guss. Fields near Palermo and Boccadifalco, Guss.

——— *Teneriffæ*, R. Br. Not unfrequent, J. B.

——— *repens*, L.

——— *compressum*, Biv. Neighbourhood of Palermo, J. B. sp.

Aira cristata, L.

—— *grandiflora*, Bert. This is I think frequent on rocky ground.

—— *aquatica*, L.

—— *agrostidea*, Spr. Madonie, Herb. nost.; meadows at Bucheri, Gussone.

—— *cæspitosa*, L. Nebrodes, Gussone.

—— *pubescens*, Vahl. Frequent on the sea-coast, J. B. sp.

—— *flexuosa*, L. Mountainous parts, J. B.

—— *articulata*, Pers. South coast, Gussone; lower region of Etna, J. B. sp. The Etna plant has a slightly different appearance, but is scarcely distinguishable as a variety: it is the *Aira Ætnensis*, Psl.

—— *caryophyllea*, Madonie, Herb. nost.; Terranova, Jan.

—— *Tenorii*, Guss., *A. pulchella*, W. Sicily, Gussone. This should be placed next to the last species, to which it is nearly allied, though certainly distinct.

—— *capillaris*, Spr. Palermo, Gussone.

—— ———, γ. Bert., *A. intermedia*, Guss. Palermo, Gussone; Madonie, Herb. nost.

Pollinia distachya, Spr. Palermo, Taormina, and elsewhere on the east coast, J. B. sp.

Andropogon hirtum, L. Frequent, J. B. sp.

——— *angustifolium*, Fl. Gr. Frequent, J. B. Should Bertoloni

be correct in distinguishing this from the *A. Ischæmum*, L., the common French species, it will be necessary to rename the *A. angustifolium*, H. and K., a Mexican species, which ought then to recover the name *A. stenophyllus*, R. and S. Syst. Nat.

Andropogon pubescens, Vis. I found this species, which is nearly allied to *A. hirtum*, L., on dry rocky ground near the monastery of San Martino, seven miles from Palermo. It is widely spread along the coast of Barbary, and has been found in Abyssinia and Nubia by Schimper and Kotschy.

Sorghum halepense, Pers. Palermo, Biv.

Holcus lanatus, L., J. B. ?

——— *mollis*, L., J. B.

Arrhenatherum avenaceum, P. de B.

Melica ciliata, L. South coast, J. B. sp.

—— *Cupani*, Guss. Madonie, Gussone.

—— *Bauhini*, W., J. B. ? These three species are very nearly allied; with the assistance of Bertoloni's remarks, both groups may be well studied in Sicily. If great difference of habit suffices to constitute a genus, these might well be separated.

—— *uniflora*, W. Etna, J. B.

—— *pyramidalis*, Bert. Not rare, J. B.

—— *minuta*, L. Latomie, Syracuse, J. B. sp.

Molinia cærulea, Mœnch. Etna ? J. B.

——— *serotina*, M. and K.

Sesleria cærulea, Scop.

——— ———, β. *tenuifolia*, Schrad.

——— ———, γ. *cylindrica*, R. and S.

——— ———, ε. *nitida*, R. and S. I fully concur in the propriety of uniting all these supposed species, as well as the *S. elongata*, W., into one. The above forms, with many intermediate ones, will be found in Sicily. The var. ε. has been found in the mountains of Madonie and Cammarata by Gussone.

Echinaria capitata, Dsf. Frequent in the south of Sicily, J. B. sp.

Poa aquatica, L.

—— *fluitans*, L.

—— *annua*, L.

—— *bulbosa*, Sm. Frequent, J. B.

—— ———, β. *vivipara*. Lower crater of Etna (Monte Rosso), J. B. sp.

—— *trivialis*, L.

—— *fertilis*, Kunth, J. B.

—— *pratensis*, L.

—— *nemoralis*, L. Etna ? J. B.

—— *compressa*, L. Madonie, Herb. nost.

—— *pilosa*, L. Sicily, J. B.

—— *Eragrostis*, L. Frequent, J. B.

—— *tritica*, Psl. A doubtful species.

Briza minor, L., J. B. ?

—— *media*, L. Not common.

—— *maxima*, L. Very common.

Dactylis glomerata, L.
——— ———, β. *glaucescens*, W.
——— ———, γ. *hispanica*, W. These supposed species are certainly mere forms of a common type; they are all found in Sicily.
——— *disticha*, nobis*. Near Palermo, J. B.
——— *litoralis*, W. Marshes near Catania, Gussone.
——— *repens*, Dsf. Salt marshes at Spaccaforno and Cape Passaro, Gussone.
Dactyloctenium Ægyptiacum, W. Near Palermo, sp. in Herb. nost.
Cynosus cristatus, L.
——— *echinatus*, L. Very common.
——— *elegans*, Dsf. Madonie, Castrogiovanni, Gussone.
Lamarckia aurea, Mœnch. This beautiful species is not uncommon.
Pennisetum distylum, Gussone. Lower part of the Monte Pellegrino, Palermo, Gussone.
Festuca expansa, Kunth (*Poa divaricata*, W., Bert.). Salt marshes of Trapani.
——— *divaricata*, Dsf. (*Triticum divaricatum*, Bert.). Sea-coast in various places, J. B. sp.
——— *maritima*, DeC. Gall. (*Triticum maritimum*, L., Bert.). St. Alessio, J. B. sp.; coast at Capaci, Gussone.
——— *rigida*, Kunth. Common, J. B.
——— *distans*, Kunth (*Poa distans*, L., Bert.). Palagonia, Gussone.
——— ———, β. (*F. thalassica* and *F. Hostii*, Kunth, *Poa maritima*, Huds.). The above species form a very natural group which can scarcely be well separated into different genera. I agree with Bertoloni in believing that there are intermediate forms connecting *Poa distans*, L., and *P. maritima*, Huds., though the opposite opinion is held by high authority.
——— *unioloides*, Kunth (*Triticum unioloides*, Vahl, Bert.). Near Palermo and Termini, Gussone.
——— *Poa*, Kunth (*Triticum tenellum*, L., Bert.). Sicily, J. B.?
——— *rottboëllioides*, Kunth (*Triticum loliaceum*, Sm., Bert.). Near Messina, J. B. sp.
——— *tenuicula*, Link (*Triticum festucoides*, Bert. i. 808). On volcanic sand in the lower region of Etna, J. B. sp. This is I suppose the *T. hispanicum* of Mr. Hogg. The whole group still requires some careful study and the examination of living specimens, as both the natural limits of the species and the synonymy are in great confusion.
——— *Sicula*, Psl. Hills of Floresta and Val di Mazzara, Gussone.
——— *Michelii*, Kunth (*Kœleria macilenta*, DeC., sec. Bertoloni). Sands of Vittoria, Gussone.
——— *ligustica*, Bert. Frequent, J. B. sp.
——— *geniculata*, W. Sea-coast, Jan.
——— *uniglumis*, Sol. Messina, &c., J. B. sp.
——— *myurus*, L.
——— ———, β. (*F. bromoides*, L.). Both are common.
——— *ciliata*, DeC. St. Alessio, J. B. sp.

* It may turn out that this is the *Wangenheimia disticha* of Mœnch (*Cynosurus Lima*, L.). I have not seen specimens of a good description.

Festuca alopecurus, Pers. I have specimens from near Messina agreeing with the plant so named by Tenore.
——— *incrassata*, Salz. Sea-shore at Girgenti and Alicata, Gussone.
——— *poæformis*, Spr. Sands of Etna, Gussone; Madonie, Jan.
——— *ovina*, L. I am quite of the opinion of Bertoloni, 'Flora Italica,' i. 601, in uniting this with *F. duriuscula*, L., and the various supposed species there mentioned, but am inclined to consider the following as distinct.
——— *rubra*, L. I am quite sure that I observed the large sea-side form of this plant on the east coast of Sicily, J. B.
——— *heterophylla*, L. Woody region of Etna, Gussone. The characters of this species remain very constant in cultivation.
——— *exaltata*, Psl.
——— *calamaria*, Sm. Woods of Etna, J. B.?
——— *pratensis*, Huds. Sicily, Gussone.
——— ———, β. (*F. elatior*, L.). Coast near Syracuse, J. B. sp. I am unable to find any permanent characters by which to separate these extreme forms, which are connected by many intermediate varieties.
——— *serotina*, L.
——— *cærulescens*, Dsf. Mountains near Palermo, Val Damone, Gussone.
——— *cristata*, L. (*Kœleria phleoides*, Pers.). Frequent, J. B. sp.
——— *hispida*, Savi. Castelvetrano, Bronte, Gussone.
——— *Ætnensis*, Psl. Lower region of Etna. This plant should be sought for, as it seems little known; Bertoloni believes it to be nearly allied to or identical with *Poa cenisia*, All.
——— *gracilis*, Mœnch. (*Brachypodium sylvaticum*, R. and S.). On Etna, J. B.?
——— *pinnata*, Huds. (*Brachypodium pinnatum*, R. and S.). Frequent, J. B. sp.
——— *phœnicoides*, L., Mant. Frequent, J. B. sp. Extremely near the last species.
Bromus secalinus, L.
——— ———, β. (*B. velutinus*, Schr.). Polizzi, Gussone.
——— *squarrosus*, L.
——— *mollis*, L. It occurs both in the pubescent and glabrous form.
——— *racemosus*, L. (*B. arvensis*, Sm.). Bertoloni is probably correct in referring the *B. arvensis*, E. B., to *B. racemosus*, L.; but I believe that the plant named *B. racemosus* by Smith and most English botanists is the glabrous form of *B. mollis* before mentioned. *B. commutatus*, Schrad., should probably be referred to the present species. The *B. arvensis* of the Italian botanists, and perhaps of Linnæus, is certainly different from the English species.
——— *intermedius*, Guss. Boccadifalco, &c., Gussone. This is not unlikely to prove a variety of *B. mollis*.
——— *lanceolatus*, Roth. Not unfrequent, J. B. sp., and certainly distinct.
——— *scoparius*, L. Terranova, J. B. sp.; Palermo, Val di Mazzara, Gussone. This species has been much confused; it is nearly allied to the last.

Bromus giganteus, L. Woody region of Etna, J. B.?
——— *asper*, L. I suspect that this and the preceding species, and possibly the following one also, will ultimately be placed in the same group with *Triticum ciliatum*, DeC.
——— *erectus*, Huds. The extreme forms of this species are at least as distinct as *Festuca pinnata*, Huds., and *F. phœnicoides*, L.
——— *sterilis*, L.
——— ———, β. *argentea*. Coast near St. Alessio, J. B. sp. I know not on what authority Bertoloni has united the *B. jubatus*, Ten., with this species.
——— *scaberrimus*, Ten.
——— *maximus*, Psl.
——— ———, β. (*B. madritensis*, Guss.). This latter is considered distinct by Professor Parlatore, who has well illustrated the Sicilian species of this genus. A great variety of forms exist in the island, but I can only separate my specimens into two specific groups, and even of these the limits are not very well defined. The synonymy is in inextricable confusion.
——— *tectorum*, L. Frequent.
——— *rubens*, L. Val di Mazzara and hills about Palermo, Guss.
——— *fasciculatus*, Psl. Near St. Alessio and Selinonte, J. B. sp.; Val di Mazzara, Gussone: a very distinct species. Had I not been desirous of avoiding unnecessary change in a mere catalogue, I should have followed Prof. Parlatore in separating the *Bromi secalini* as a distinct genus, to which he has given the name *Serrafalcus*, in the small monograph already referred to.
Stipa pennata, L. Hills of Termini and Altavilla, Gussone.
—— *capillata*, L. Terranova, Castelvetrano, Gussone.
—— *tortilis*, Dsf. Frequent, J. B. sp.
Aristella bromoides, Bertoloni (*Stipa Aristella*, L.). Not unfrequent, J. B.
Avena sterilis, L.
—— *fatua*, L.
—— *fallax*, Ten. Hills about Palermo and Caltavoturo, Gussone.
—— *pubescens*, L. Sicily, J. B.?
—— *pratensis*, L. Frequent, J. B.
—— *condensata*, Link. In many places on the coast, J. B. sp.
—— *neglecta*, Savi. Terranova, Gussone. It is admitted that most of the characters which separate this and the preceding are variable.
—— *parviflora*, Dsf.
—— *flavescens*, L. (To this Bertoloni refers *Trisetum splendens*, Psl.)
—— *fragilis*, L. (*Gaudinia fragilis*, R and S.). Common, J. B.
Danthonia provincialis, DeC. Lower region of Etna, J. B.?
Lagurus ovatus, L. Very common.
Arundo Donax, L.
——— *pliniana*, Turr. Chiefly about Palermo. This is the *A. mauritanica*, Dsf., of Mr. Hogg.
——— *Ampelodesmos*, Cyr. Common.
——— *Phragmites*, L.
——— *epigejos*, L.
——— *montana*, R. and S. Etna, J. B.?

Ammophila arundinacea, Host. Sea-shore at Terranova, J. B. sp.
Lolium perenne, L.
——— ———, β. (*L. strictum*, Psl.). Sands near Messina, J. B. sp.
——— *temulentum*, L.
——— *temulentum*, β. (*L. speciosum*, Guss.). Frequent, J. B.
Rottboëllia incurvata, L. fil. In many places, J. B. sp.
——— *filiformis*, Roth. Less frequent than the preceding, J. B. Nothing but a careful study of the living plants will settle the still doubtful question as to the identity of these two species.
——— *cylindrica*, W. Mouth of the Anapus near Syracuse, J. B. sp.; Mondello, Gussone.
——— *fasciculata*, Dsf. South coast, J. B.
Psilurus nardoides, Trin. Frequent in the lower region of Etna, J. B. sp.
Elymus europæus, L. In woods. I believe I have seen Sicilian specimens of *E. crinitus*, Schreb.
Hordeum bulbosum, L. Mistretta, Gussone.
——— *murinum*, L. Not common: near Syracuse, J. B. sp.
——— *pratense*, Huds. Mountainous parts.
——— *maritimum*, With. Frequent, J. B. sp.
Ægilops ovata, L. Common.
——— *neglecta*, Req., Savi. J. B. sp.?
——— *triaristata*, Req.? J. B. sp.
——— *triuncialis*, L. J. B. sp.? As I before remarked, I am unable to distinguish the species of this genus; I believe that I have found the above four forms, and probably the *Æ. triticoides*, Req., and *Æ. cylindrica*, Host, are also to be found; the genus calls for careful examination.
Secale Montanum, Guss. Frequent, J. B.
Triticum æstivum, sylvestre. Frequent in various situations, and to all appearance spontaneous, J. B. See Bert. Fl. It. i. 796.
——— *villosum*, Psl. Frequent, J. B. sp.
——— *junceum*, L. Sandy sea-shores, J. B.
——— *scirpeum*, Guss. Salt marshes at Sferracavallo, Serra di Falco and Termini, Gussone.
——— *repens*, L.
——— ———, β. W.
——— ———, γ. Bert. (*T. litorale*, Host). Coast near S^ta^ Agata, Gussone.
——— *panormitanum* (*Agropyrum panormitanum* of Parlatore). I have not yet seen specimens of this plant. It is to be feared that many of the described species of this section are merely variable forms of two or three types. Bertoloni unites *T. glaucum* of Host with *T. repens*, L.
——— *caninum*, Huds. May not even this be an extreme form of *T. repens*?
Lappago racemosa, W. This is scarce in Sicily.
Nardus stricta, L.
Lygeum spartum, L. This singular and beautiful plant is almost confined to the south coast between Terranova and Sciacca.